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Remarks:

Applicant appreciatively acknowledges the Examiner's confirmation of receipt of Applicant's claim for priority and certified priority document under 35 U.S.C. § 119(a)-(d).

Reconsideration of the application is respectfully requested.

Claims 1 - 18 are presently pending in the application. New claims 11 - 18 have been added. As it is believed that the claims were patentable over the cited art in their original form, the claims have not been amended to overcome the references.

In items 3 - 4 of the above-identified Office Action, claims 1 - 10 was rejected as allegedly being indefinite under 35 U.S.C. § 112, second paragraph as allegedly being incomplete. More specifically, it was alleged in the Office Action that claim 1 omitted a structural cooperative relationship because "the applicant did not specify a particular series or model of N-channel power FET and its drive circuits in this invention".

Applicant respectfully disagrees with the rejection of the claims under 35 U.S.C. § 112. There is no such requirement in the art to recite in connection with a generic element a particular model or series (i.e., merely denoting a non-generic brand). The operation of N-Channel power FETs are

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very well understood in the art. As a result of the understanding of a person of ordinary skill in the art, based on Applicant's recitation of an "N-Channel Power FET" (i.e., which recitation is already believed to be **very specific**), there is no requirement for Applicant to further recite a series or model (i.e., limited to a particular manufacturer). Rather, MPEP § 2172.01 defines missing structural elements, as follows:

Such essential matter may include **missing elements, steps or necessary structural cooperative relationships of elements** described by the applicant(s) as necessary to practice the invention.
[emphasis added by Applicant]

None of the above applies to the particular rejection, as the claim does not lack an element, step or the necessary structural cooperative relationships of elements. Applicant has fully recited the elements (i.e., "N-channel power FET and drive circuits") such that it is understood by a person of skill in the art and enabled.

As such, Applicant believes that the instant claims are not clacking any "structural cooperative relationships" and, thus, it is accordingly believed that the claims meet the requirements of 35 U.S.C. § 112, second paragraph.

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In item 4 of the Office Action, claim 1 was rejected under 35 U.S.C. § 103(a) as allegedly being obvious over Applicant's admitted prior art ("AAPA") in view of allegedly well-known HEXFET Power MOSFET from International Rectifier ("HEXFET IRFL210").

Applicant notes that claims 2 - 10 were not rejected over any prior art. MPEP § 707.07 states that an Examiner's action will be complete as to all matters and that matters of form need not be raised by the examiner until a claim is found allowable. Claims 2 - 10 of the instant application were rejected only under 35 U.S.C. § 112, second paragraph, in light of the rejection of claim 1. As such, it is believed that claims 2 - 10 are patentable over the art of record and, now that the 35 U.S.C. § 112 rejection has been addressed herein, should be allowable. Applicant respectfully requests that an indication of the allowability of claims 2 - 10 be provided.

Further, Applicant respectfully traverses the rejection of claim 1 over the AAPA and HEXFET references.

More particularly, claim 1 recites, among other limitations:

a power switching element having a controlled path
connected in series with said controlled path of said
high side switch and of said low side switch to draw

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lost power from said firing circuit during the firing pulse; [emphasis added by Applicant]

Applicant's new independent claim 11 additionally recites the above limitation, among others. As such, Applicant's claimed invention requires the power switching element to be inserted in the control path of the high side switch and the control path of the low side switch, causing the power switching element to draw lost power from the firing circuit from the firing circuit during the firing pulse. Applicant's inventive configuration and use of the lost power from the firing circuit by the power switching element is neither taught, nor suggested, by the AAPA or the understanding in the art of the operation of the HEXFET IRFL210.

More particularly, as stated on page 3 of the Office Action, the AAPA does not teach or suggest a power switching element having a controlled path connected in series with a control path of the high side switch and of the low side switch. Rather, page 3 of the Office Action goes on to allege:

However, a HEXFET Power MOSFET from International Rectifier (a very well known provider) is a fundamental component to electronic designers to perform a switching task under controls.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify AAPA's design to include IRFL210 of International Rectifier so that a designer can switch ON/OFF a path/connection in an electronic circuit; this gives more control-abilities to a designer for

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circuits that need reliability. [emphasis added by Applicant]

Applicant respectfully disagrees with the above alleged motivation for the hindsight reconstruction of Applicant's claimed invention. The mere recitation of a HEXFET IRFL2110 (Applicant notes that the Examiner did not provide a specification or any other printed publication describing the use of the HEXFET IRFL2110) does not provide a teaching, suggestion or motivation to modify the AAPA, as suggested in the Office Action. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion or motivation to do so found either in the references themselves or in the knowledge generally available to one of skill in the art. Applicant's claimed invention uses a particular configuration of the power switching element, high side and low side switches, to draw lost power from the firing circuit from the firing circuit during the firing pulse, as recited in the claims, themselves. As such, Applicant's inventive configuration is not "so that a designer can switch ON/OFF a path/connection in an electronic circuit; this gives more control-abilities to a designer for circuits that need reliability", and such would not provide the motivation of one skilled in the art to produce the claimed invention, contrary to the statement in the Office Action. As

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such, Applicant's inventive improvement over the AAPA is not taught, suggested or motivated by the AAPA, the HEXFET IRFL210, or the knowledge generally in the art.

Rather, there is no such motivation in the present case, absent impermissible hindsight reconstruction of Applicant's invention. The AAPA does not teach, or suggest the clever and inventive use of a power switching element, as used by Applicant's claimed invention, connected in the control path of the high side switch and the low side switch to draw power from the firing circuit during the firing pulse, nor does the AAPA provide any reason or motivation to modify the AAPA. Additionally, the HEXFET IRFL210 is not a publication, but a device, and the device, itself, does not provide any teaching suggestion or motivation, to modify the AAPA, as suggested in the Office Action. No publication or other teaching or suggestion has been found to suggest the use of the HEXFET IRFL210 in the manner used in Applicant's claims.

Clearly, there is no motivation in the references, or in the knowledge of the art, generally, to add the HEXFET IRFL210 to the AAPA to use power switching element connected in the control path of the high side switch and the low side switch to draw power from the firing circuit during the firing pulse, as required by Applicant's claims. As such, Applicant

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respectfully traverses the rejection based on a combination of the AAPA and the HEXFET IRFL210, which, clearly does not teach, suggest or motivate a modification of the AAPA to accomplish Applicant's inventive solution. Applicant's claims are, thus, believed patentable over the AAPA and HEXFET IRFL210, whether taken alone, or even in combination.

It is accordingly believed that none of the references, whether taken alone or in any combination, teach or suggest the features of claims 1 and 11. Claims 1 and 11 are, therefore, believed to be patentable over the art. The dependent claims are believed to be patentable as well because they all are ultimately dependent on claims 1 or 11.

In view of the foregoing, reconsideration and allowance of claims 1 - 18 are solicited.

In the event the Examiner should still find any of the claims to be unpatentable, counsel would appreciate receiving a telephone call so that, if possible, patentable language can be worked out.

If an extension of time for this paper is required, petition for extension is herewith made.

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Please charge any fees that might be due with respect to
Sections 1.16 and 1.17 to the Deposit Account of Lerner
Greenberg Sterner LLP, No. 12-1099.

Respectfully submitted,



For Applicant

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